



Case report

Images in trauma: An unusual cause of airway obstruction

Daniel Holena^{a,*}, Sarah M. Perman^b, Abigail Hankin^b, C. William Schwab^c^a Division of Traumatology and Surgical Critical Care, Hospital of the University of Pennsylvania, 2 Dulles, 3400 Spruce St., Philadelphia, PA 19104, United States^b Department of Emergency Medicine, Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia, PA 19104, United States^c Division of Traumatology and Surgical Critical Care, Hospital of the University of Pennsylvania, 2 Dulles, 3400 Spruce St., Philadelphia, PA 19104, United States

ARTICLE INFO

Article history:

Accepted 12 May 2009

1. Unusual cause of upper airway obstruction

1.1. Presentation

A 55-year-old male with a history of alcoholism presented to the trauma bay after being found unconscious. On arrival, he was haemodynamically stable with an oxygen saturation of 100%. He was able to phonate, and had clear breath sounds bilaterally. His exam was also notable for an occipital scalp haematoma and bilateral periorbital swelling. Rapid sequence intubation was

initiated secondary to agitation and inability to cooperate with further assessment. After administration of a paralytic agent, the patient quickly desaturated. The patient could not be intubated secondary to an object visibly obstructing the posterior pharynx. Bag-valve mask ventilation was also unsuccessful, therefore emergent cricothyrotomy was performed at the bedside. The patient was then taken to radiology for computed tomography to rule out traumatic injury.

1.2. Diagnosis

Coronal reconstructions of the cervical spine revealed a foreign body in the posterior pharynx (Fig. 1). The cricothyroidotomy was revised to a tracheostomy in the operating room, at which time a 12 cm pine cone was removed from the patient's upper airway (Fig. 2). Creation of an emergent surgical airway is indicated in the patient who cannot be intubated or oxygenated.¹ Cricothyrotomy is the surgical airway of choice in emergent airway obstruction secondary to foreign body, since it allows the airway to be established distal to the obstructing agent.² The patient recovered fully but was unable to relate how the pine cone came to be lodged in his airway.



Fig. 1. Coronal reconstructions of a CT scan of the neck revealing a foreign body in the posterior pharynx.



Fig. 2. Intraoperative photograph of removed body—a 12 cm pine cone.

* Corresponding author. Tel.: +1 215 588 5144.

E-mail address: Daniel.holena@uphs.upenn.edu (D. Holena).

References

1. Airway Ventilatory Management. Advanced trauma life support for doctors, student course manual, 7th ed., Chicago, IL: American College of Surgeons; 2005. p. 41–68.
2. Thomas SH, Brown DFM. Foreign bodies. In: Marx JA, Hockberger RS, Walls RM, editors. Rosen's emergency medicine: concepts and clinical practice. 6th ed., Philadelphia, PA: Mosby Elsevier; 2006. p. 859–81.